§53.21 Errors in service.

When an official grader, supervisor, or other responsible employee of the Branch has evidence of misgrading, or of incorrect certification or other incorrect determination or identification as to the class, grade, other quality, or compliance of livestock, he shall report the matter to his immediate supervisor. The supervisor will investigate the matter and, if he deems advisable, will report it to the owner or his agent. The supervisor shall take appropriate action to correct errors found in the determination or identification of class, grade or other quality or compliance of livestock if the livestock is still owned by the person who owned them when, and are still located at the establishment where, the incorrect service was rendered and if such service was rendered by a grader under the jurisdiction of such supervisor, and the supervisor shall take adequate measures to prevent the recurrence of such errors.

Subpart B—Standards

CATTLE

§53.201 Cattle.

The official standards for live cattle developed by the United States Department of Agriculture provide for segregation first according to use—slaughter and feeder—then as to class, which is determined by sex condition, and then as to grade, which is determined by the apparent relative excellence and desirability of the animal for its particular use. Differentiation between slaughter and feeder cattle is based solely on their intended use rather than on specific identifiable characteristics of the cattle. Slaughter cattle are those which are intended for slaughter immediately or in the very near future. Feeder cattle are those which are intended for slaughter after a period of feeding. However, under some economic conditions specific kinds of cattle may be considered as feeders whereas under other economic conditions they might be considered as slaughter cattle.

§53.202 Classes of slaughter and feeder cattle.

The classes of slaughter and feeder cattle are steers, bullocks, bulls, heifers, and cows. Definitions of the respective classes are as follows:

(a) *Steer.* A steer is a male bovine castrated when young and which has not begun to develop the secondary physical characteristics of a bull.

(b) *Bullock.* A bullock is a young (under approximately 24 months of age) male bovine (castrated or uncastrated) that has developed or begun to develop the secondary physical characteristics of a bull.

(c) *Bull.* A bull is a mature (approximately 24 months of age or older) uncastrated, male bovine. However, for the purpose of these standards, any mature, castrated, male bovine which has developed or begun to develop the secondary physical characteristics of an uncastrated male also will be considered a bull.

(d) *Cow.* A cow is a female bovine that has developed through reproduction or with age, the relatively prominent hips, large middle, and other physical characteristics typical of mature females.

(e) *Heifer.* A heifer is an immature female bovine that has not developed the physical characteristics typical of cows.

§53.203 Application of standards for grades of slaughter cattle.

(a) *General.* Grades of slaughter cattle are intended to be directly related to the grades of the carcasses they produce. To accomplish this, these slaughter cattle grade standards are based on factors which are related to the grades of beef carcasses. The quality and yield grade standards are contained in separate sections of the standards. The quality grade standards are further divided into two sections applicable to: (1) Steers, heifers, and cows and (2) bullocks. Eight quality designations—Prime, Choice, Select, Standard, Commercial, Utility, Cutter, and Canner—are applicable to steers and heifers. Except for Prime, the same designations also apply to cows. The quality designations for bullocks are Prime, Choice, Select, Standard, and Utility. There are five yield grades,

which are applicable to all classes of slaughter cattle and are designated by numbers 1 through 5, with Yield Grade 1 representing the highest degree of cutability. The grades of slaughter cattle may consist of the quality grade only, the yield grade only, or a combination of the quality grade and the yield grade except that slaughter bulls are yield graded only.

(b) *Quality Grades.* (1) Slaughter cattle quality grades are based on an evaluation of factors related to the palatability of the lean, herein referred to as ''quality.'' Quality in slaughter cattle is evaluated primarily by the amount and distribution of finish, the firmness of muscling, and the physical characteristics of the animal associated with maturity. Progressive changes in maturity past 30 months of age and in the amount and distribution of finish and firmness of muscling have opposite effects on quality. Therefore, for cattle over 30 months of age in each grade, the standards require a progressively greater development of the other quality-indicating factors. In cattle under about 30 months of age, a progressively greater development of the other quality-indicating characteristics is not required.

(2) Since carcass indices of quality are not directly evident in slaughter cattle, some other factors in which differences can be noted must be used to evaluate their quality. Therefore, the amount of external finish is included as a major grade factor herein, even though cattle with a specific degree of fatness may have widely varying degrees of quality. Identification of differences in quality among cattle with the same degree of fatness is based on distribution of finish and firmness of muscling. Descriptions of these factors are included in the specifications. For example, cattle which have more fullness of the brisket, flank, twist, and cod or udder and which have firmer muscling than that indicated by any particular degree of fatness are considered to have higher quality than indicated by the degree of fatness.

(3) The approximate maximum age limitation for the Prime, Choice, and Standard grades of steers, heifers, and cows is 42 months. The maximum age limitation for the Select grade for steers, heifers, and cows is approximately 30 months. The Commercial grade for steers, heifers, and cows includes only cattle over approximately 42 months. There are no age limitations for the Utility, Cutter, and Canner grades of steers, heifers, and cows. The maximum age limitation for all grades of bullocks is approximately 24 months.[1]

(c) *Yield Grades.* (1) The yield grades for slaughter cattle are based on the same factors as used in the official yield grade standards for beef carcasses. Those factors and the change in each which is required to make a full yield grade change are as follows:

Factor	Effect of increase on yield grade[1]	Approximate change in each factor required to make a full yield grade change[2]
Thickness of fat over ribeye..	Decreases	4/10 in.
Percent of kidney, pelvic, and heart fat..	do	5%.
Carcass weight	do	260 lb.
Area of ribeye ...	Increases	3 in.[2]

[1] The yield grades are denoted by numbers 1 through 5 with Yield Grade 1 representing the highest cutability or yield of closely trimmed retail cuts. Thus, an ''increase'' in cutability means a smaller yield grade number while a ''decrease'' in cutability means a larger yield grade number.

[2] This assumes no change in the other factors.

(2) When evaluating slaughter cattle for yield grade, each of these factors can be estimated and the yield grade determined therefrom by using the equation contained in the official standards for grades of carcass beef. However, a more practical method of appraising slaughter cattle for yield grade is to use only two factors normally considered in evaluating live cattle—muscling and fatness.

(3) In the latter approach to determining yield grade, evaluation of the thickness and fullness of muscling in

[1] Maximum maturity limits for bullock carcasses are the same as those described in the beef carcass grade standards for steers, heifers, and cows at about 30 months of age. However, bullocks develop carcass indicators of maturity at younger chronological ages than steers. Therefore, the approximate age at which bullocks develop carcass indicators of maximum maturity is shown herein as 24 months rather than 30 months.

relation to skeletal size largely accounts for the effects of two of the factors—area of ribeye and carcass weight. By the same token, an appraisal of the degree of external fatness largely accounts for the effects of thickness of fat over the ribeye and the percent of kidney, pelvic, and heart fat.

(4) These fatness and muscling evaluations can best be made simultaneously. This is accomplished by considering the development of the various parts based on an understanding of how each part is affected by variations in muscling and fatness. While muscling of most cattle develops uniformly, fat is normally deposited at a considerably faster rate on some parts than on others. Therefore, muscling can be appraised best by giving primary consideration to the parts least affected by fatness, such as the round and the forearm. Differences in thickness and fullness of these parts—with appropriate adjustments for the effects of variations in fatness—are the best indicators of the overall degree of muscling in live cattle.

(5) On the other hand, the overall fatness of an animal can be determined best by observing those parts on which fat is deposited at a faster-than-average rate. These include the back, loin, rump, flank, cod or udder, twist, and brisket. As cattle increase in fatness, these parts appear progressively fuller, thicker, and more distended in relation to the thickness and fullness of the other parts, particularly the round. In thinly muscled cattle with a low degree of finish, the width of the back usually will be greater than the width through the center of the round. The back on either side of the backbone also will be flat or slightly sunken. Conversely, in thickly muscled cattle with a similar degree of finish, the thickness through the rounds will be greater than through the back and the back will appear full and rounded. At an intermediate degree of fatness, cattle which are thickly muscled will be about the same width through the round and back and the back will appear only slightly rounded. Thinly muscled cattle with an intermediate degree of finish will be considerably wider through the back than through the round and will be nearly flat across the back. Very fat cattle will be wider through the back than through the round, but this difference will be greater in thinly muscled cattle than in those that are thickly muscled. Such cattle with thin muscling also will have a distinct break from the back into the sides, while those with thick muscling will be nearly flat on top but will have a less distinct break into the sides. As cattle increase in fatness, they also become deep bodied because of large deposits of fat in the flanks and brisket and along the underline. Fullness of the twist and cod or udder and the bulge of the flanks, best observed when an animal walks, are other indications of fatness.

(6) In determining yield grade, variations in fatness are much more important than variations in muscling.

(d) *Other considerations.* (1) Other factors such as heredity and management also may affect the development of the grade-determining characteristics in slaughter cattle. Although these factors do not lend themselves to description in the standards, the use of factual information of this nature is justifiable in determining the grade of slaughter cattle.

(2) Slaughter cattle qualifying for any particular grade may vary with respect to the relative development of the individual grade factors. In fact, some will qualify for a particular grade although they have some characteristics more nearly typical of cattle of another grade. Because it is impractical to describe the nearly infinite number of recognizable combinations of characteristics, the quality and yield grade standards describe only cattle which have a relatively similar development of the various quality and yield grade determining factors and which are near the lower limits of these grades. The requirements are given for two maturity groups in the quality grade standards for steers, heifers, and cows—but for only one maturity group for bullocks. In the yield grade standards, cattle with two levels of muscling are described and specific examples in terms of carcass characteristics also are included.

[42 FR 53902, Oct. 4, 1977, as amended at 52 FR 35683, Sept. 23, 1987; 54 FR 3411, Jan. 24, 1989; 61 FR 2895, Jan. 30, 1996]

EFFECTIVE DATE NOTE: At 61 FR 2895, Jan. 30, 1996, §53.203(b)(3) was revised, effective July 1, 1996. At 61 FR 19155, May 1, 1996, the effective date was postponed until Jan. 31, 1997. For the convenience of the reader, the superseded text is set forth as follows:

§ 53.203 Application of standards for grades of slaughter cattle.

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(b) * * *

(3) The approximate maximum age limitation for the Prime, Choice, Select, and Standard grades of steers, heifers, and cows is 42 months.The Commercial grade for steers, heifers, and cows includes only cattle over approximately 42 months. There are no age limitations for the Utility, Cutter, and Canner grades of steers, heifers, and cows. The maximum age limitation for all grades of bullocks is approximately 24 months.[1]

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§ 53.204 Specifications for official U.S. standards for grades of slaughter steers, heifers, and cows (quality).

(a) *Prime.* (1) Slaughter steers and heifers 30 to 42 months of age possessing the minimum qualifications for Prime have a fat covering over the crops, back, ribs, loin, and rump that tends to be thick. The brisket, flanks, and cod or udder appear full and distended and the muscling is very firm. The fat covering tends to be smooth with only slight indications of patchiness. Steers and heifers under 30 months of age have a moderately thick but smooth covering of fat which extends over the back, ribs, loin, and rump. The brisket, flanks, and cod or udder show a marked fullness and the muscling is firm.

(2) Cattle qualifying for the minimum of the Prime grade will differ considerably in cutability because of varying combinations of muscling and degree of fatness. Cattle with higher cutability than normal for this grade are thickly muscled and have a lower degree of fatness than described for the Prime grade. Such cattle have less width of back and loin and are less uniform in width than normal for the Prime grade. The thick, full muscling gives the back and loin a well-rounded appearance with very little evidence of flatness. The thickness through the middle part of the rounds is greater than over the top and the thick muscling through the shoulders causes them to be slightly prominent. Although such cattle have a lower degree of fatness over the back and loin than described as typical, evidence of more fatness than described is noticeable in the brisket, flanks, twist, and cod or udder and the muscling is firmer than described. Conversely, cattle with lower cutability than normal for this grade are thinly muscled and have a higher degree of fatness than described for the Prime grade. The distribution of fat is not typical, for it is thicker over the crops, back, loin, and rump than described while the brisket, flanks, twist, and cod or udder indicate less fatness. Such cattle are wide and nearly flat over the back and loin and there is a sharp break from these parts into the sides. The width over the back is much greater than through the rounds and shoulders.

(3) Cows are not eligible for the Prime grade.

(b) *Choice.* (1) Slaughter steers, heifers, and cows 30 to 42 months of age possessing the minimum qualifications for Choice have a fat covering over the crops, back, loin, rump, and ribs that tends to be moderately thick. The brisket, flanks, and cod or udder show a marked fullness and the muscling is firm. Cattle under 30 months of age carry a slightly thick fat covering over the top. The brisket, flanks, and cod or udder appear moderately full and the muscling is moderately firm.

(2) Cattle qualifying for the minimum of the Choice grade will differ considerably in cutability because of varying combinations of muscling and degree of fatness. Cattle with higher cutability than normal for this grade are thickly muscled and have a lower degree of fatness than described for the Choice grade. Such cattle are less uniform in width than normal for the Choice grade. The thick, full muscling over the top results in a rounded appearance with little evidence of flatness. The thickness through the middle part of the rounds is greater than over the top and the thick muscling through the shoulders causes them to be slightly prominent. Although such cattle have a lower degree of fatness over the